#17

SEQUENCE LISTING

<110> DANIELL, HENRY

<120> GENETIC ENGINEERING OF COTTON TO INCREASE FIBER STRENGTH, WATER ABSORPTION AND DYE BINDING

<130> 1483-R-00

<140> 09/251,638
<141> 1999-02-17

<150> 60/074,997
<151> 1998-02-17

<160> 5

<170> PatentIn Ver. 2.1

<210> 1
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 1
Val Pro Gly Val Gly
1 5

<210> 2
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 2
Gly Val Gly Val Pro
1 5

<210> 3
<211> 605
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 3
Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
1 5 10 15

Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val

20 25 30

Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
35 40 45

Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
50 55 60

Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
65 70 75 80

Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
85 90 95

Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
100 105 110

Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
115 120 125

Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
130 135 140

Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
145 150 155 160

Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
165 170 175

Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
180 185 190

Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
195 200 205

Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
210 215 220

Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
225 230 235 240

Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
245 250 255

Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
260 265 270

Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
275 280 285

Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
290 295 300

Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
305 310 315 320

Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
325 330 335

Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
340 345 350

Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
355 360 365

Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
370 375 380

Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
385 390 395 400

Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
405 410 415

Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
420 425 430

Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
435 440 445

Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
450 455 460

Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
465 470 475 480

Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
485 490 495

Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
500 505 510

Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
515 520 525

Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
530 535 540

Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
545 550 555 560

Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
565 570 575

Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
580 585 590

Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
595 600 605

<210> 4
<211> 100
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 4
Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly

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  1               5                  10                  15

Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
            20                  25                  30

Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
        35                  40                  45

Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
    50                  55                  60

Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
65                  70                  75                  80

Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
                85                  90                  95

Val Gly Val Pro
            100
```

<210> 5
<211> 605
<212> PRT
<213> Artificial Sequence

<220>
<221> repeat_unit
<222> 1..605
<223> Repeats at least once

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 5

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Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
  1               5                  10                  15

Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
            20                  25                  30

Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
        35                  40                  45

Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
    50                  55                  60

Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
65                  70                  75                  80

Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
                85                  90                  95

Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
            100                 105                 110

Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
        115                 120                 125
```

Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
130 135 140

Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
145 150 155 160

Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
165 170 175

Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
180 185 190

Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
195 200 205

Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
210 215 220

Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
225 230 235 240

Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
245 250 255

Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
260 265 270

Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
275 280 285

Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
290 295 300

Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
305 310 315 320

Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
325 330 335

Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
340 345 350

Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
355 360 365

Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
370 375 380

Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
385 390 395 400

Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
405 410 415

Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
420 425 430

Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
435 440 445

Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val

```
    450                 455                 460

Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
465                 470                 475                 480

Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
                485                 490                 495

Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
            500                 505                 510

Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
        515                 520                 525

Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
    530                 535                 540

Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
545                 550                 555                 560

Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
                565                 570                 575

Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
            580                 585                 590

Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
        595                 600                 605
```